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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,958	12/14/2006	Takeshi Saito	297517US2RD PCT	7388
22850 7590 11/12/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER VAUGHAN, MICHAEL R	
			ART UNIT	PAPER NUMBER
			2431	
			NOTIFICATION DATE	DELIVERY MODE
			11/12/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/599,958	<b>Applicant(s)</b> SAITO ET AL.	
	<b>Examiner</b> MICHAEL R. VAUGHAN	<b>Art Unit</b> 2431	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on **9/22/09** has been entered.

Claims 1, 10, and 19 are amended. Claims 1-20 are pending.

### ***Response to Amendment***

#### ***Claim Objections***

The objection to claim 20 has been withdrawn.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1, 10, and 19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claim 1, 10, 19, the newly amended limitation is indefinite. As understood, the round trip time (RTT) is a value which is measured. It is subject to the environment factors occurring during the measurement. It is unclear how changing parameters can switch the RTT because it is not a predetermined value. A switch is thought of as a means to change between predetermined values, such as 'off' and 'on'. The parameters cannot guarantee the RTT will be shortened because it must be measured. The correlation between switching and a measured value does not imply causation. Just because the parameters change and the RTT measured is less, does not prove that the change in parameters caused the decrease in RTT. The two devices may have gotten closer. Moreover, the change of parameters cannot control how long (length of temporary) the RTT is decreased, because the two devices could be moved far apart and even though the parameters have changed, the RTT increases. Therefore the newly amended limitation is indefinite because it is unclear, and unreliable, how the mere change of parameters can switch the RTT. For purposes of examination, "the change being capable of switching the RTT is temporarily shortened" is interpreted as intended use.

### ***Response to Arguments***

Applicant's arguments with respect to claims 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 10-13, and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP Application Publication 2005/0027984 to Saito et al., hereinafter Saito in view of USP Application Publication 2003/0214908 to Kumar et al. hereinafter Kumar.

As per claim 1, Saito teaches a transmitter, comprising: a network interface unit connected to a wireless network capable of transmitting contents for which copyright protection is necessary (101);

an encryption processing unit configured to encrypt contents for which copyright protection is necessary (101);

an RTT measuring unit configured to measure a round trip time after a predetermined packet is transmitted to a receiver, until a response corresponding to the transmitted packet is received (129);

a communication permission determination unit configured to permit transmission of the contents for which protection is necessary when the round trip time measured by the RTT measuring unit is within a predetermined time (129). Saito is silent in explicitly disclosing a parameter modification unit configured to change parameters of the wireless network, the change being capable of switching the RTT is temporarily shortened. Kumar teaches this limitation in that a target RTT can be achieved by dynamically adjusting the parameters of the network (0029). Saito aims for a predetermined time. Therefore it is obvious the network of Saito can tweak the parameters of the network to achieve this target. The claim is obvious because combining known methods which produce predictable results is within the ordinary capabilities of one of ordinary skill in the art.

As per claim 10, Saito teaches a receiver, comprising: a network interface unit connected to a wireless network capable of transmitting contents for which copyright protection is necessary (109);

an encryption processing unit configured to encrypt contents for which copyright protection is necessary (109);

an RTT measuring unit configured to measure a round trip time after a predetermined packet is transmitted to a receiver, until a response corresponding to the transmitted packet is received (129);

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a communication permission determination unit configured to permit transmission of the contents for which protection is necessary when the round trip time measured by the RTT measuring unit is within a predetermined time (129). Saito is silent in explicitly disclosing a parameter modification unit configured to change parameters of the wireless network, the change being capable of switching the RTT is temporarily shortened. Kumar teaches this limitation in that a target RTT can be achieved by dynamically adjusting the parameters of the network (0029). Saito aims for a predetermined time. Therefore it is obvious the network of Saito can tweak the parameters of the network to achieve this target. The claim is obvious because combining known methods which produce predictable results is within the ordinary capabilities of one of ordinary skill in the art.

As per claims 2 and 11, Saito teaches authentication & key exchange unit to authentication & key exchange processing with the receiver (101);

wherein the parameter modification unit the parameters to measure the round trip time when the authentication & key exchange unit performs the authentication & key exchange processing, and puts back the parameters after the measurement of the round trip time is completed, before the authentication & key exchange unit completes the authentication & key exchange processing (101 and 075).

As per claims 3 and 12, Saito teaches authentication & key unit to authentication & key exchange processing with the receiver (101);

wherein the modification unit changes the parameters to measure the round trip time when the authentication & key exchange unit performs the authentication & key

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exchange processing, and puts back the parameters after the authentication & key exchange unit completes the authentication & key exchange processing (101 and 075).

As per claims 4 and 13, Saito teaches authentication & key exchange unit configured to perform authentication & key exchange processing with the receiver (101); wherein the parameter modification unit changes the parameters to measure the round trip time before transmission of commands relating to contents for which copyright protection is necessary is begun, and puts back the parameters after transmission processing of contents for which copyright protection is necessary is completed (101 and 075).

As per claim 19, Saito teaches a communication control program comprising (101): measuring a round trip time after a predetermined packet is transmitted to the other communication apparatus, until a response corresponding to the transmitted packet is received (129);

permitting transmission or reception of contents for which copyright protection is necessary when the measured round trip time is within a predetermined time (129);

transmitting or receiving the encrypted contents via a wireless network when transmission or reception of the contents is permitted (129). Saito is silent in explicitly disclosing a parameter modification unit configured to change parameters of the wireless network, the change being capable of switching the RTT is temporarily shortened. Kumar teaches this limitation in that a target RTT can be achieved by dynamically adjusting the parameters of the network (0029). Saito aims for a predetermined time. Therefore it is obvious the network of Saito can tweak the



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parameters of the network to achieve this target. The claim is obvious because combining known methods which produce predictable results is within the ordinary capabilities of one of ordinary skill in the art.

Claims 5-9, 14-18, and 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Saito and Kumar as applied to claims 1, 10, and 20 above, and further in view of USP Application Publication 2003/0197488 to Hulvey.

As per claims 5, 14, and 20, Saito and Kumar are silent in disclosing the wireless network is Bluetooth; and the parameter modification unit changes at least one of a sniff interval expressing transmission and reception interval, a polling interval, transmission power and master-slave prescribed by a standard of Bluetooth as parameters. Saito teaches modifying the parameters during the RTT measurement (101). Saito also teaches the secure pairing of two devices not unlike the Bluetooth protocol. Saito teaches a short-ranged wireless communication but not specifically Bluetooth. Kumar teaches modifying network parameters in order to achieve a target RTT (0029). Hulvey teaches a wireless network is Bluetooth; and the parameter modification unit changes at least one of a sniff interval expressing transmission and reception interval, a polling interval, transmission power and master-slave prescribed by a standard of Bluetooth as parameters (0052). Saito also teaches controlling the power of the devices in the wireless network (101). Hulvey also teaches this mechanism as means to conserve power among other reasons. Controlling the parameters of a Bluetooth network was

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well known in the art at the time of the invention. Networks have parameters. Bluetooth network has standard parameters. It appears that adjusting the intervals of response time between masters and slaves will affect the RTT. It is obvious that if a device can respond quicker (i.e. the intervals are shorter) and RTT is measure by the time it takes a receiver to respond, that RTT will be affected. This does not appear to be an inventive step, but merely an observation. Therefore the claim would have been obvious because controlling Bluetooth parameters was recognized as part of the ordinary capabilities of one skilled in the art and because applying a known technique to a known system ready for improvement to yield predictable results is within those capabilities. Saito teaches a short-ranged wireless communication. Bluetooth is a type of short-ranged wireless communication. Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to substitute Bluetooth into the system of Saito. The claim would have been obvious because a person of ordinary skill has good reason to pursue the known options within his or her technical grasp.

As per claims 6 and 15, Saito is silent in disclosing the parameter modification unit sets the sniff interval shorter than a normal interval when the RTT measuring unit performs the measurement. Hulvey teaches the parameter modification unit sets the sniff interval shorter than a normal interval when the RTT measuring unit performs the measurement (0053). Examiner relies upon the rationale for combining Saito and Hulvey as cited above for combining the modification of parameters of a Bluetooth communication.

As per claims 7 and 16, Saito is silent in disclosing the parameter modification unit sets the polling interval shorter than a normal interval when the RTT measuring unit performs the measurement. Hulvey teaches the parameter modification unit sets the polling interval shorter than a normal interval (0052). Examiner relies upon the rationale for combining Saito and Hulvey as cited above for combining the modification of parameters of a Bluetooth communication.

As per claims 8 and 17, Saito is silent in disclosing the parameter modification unit sets a transmission power weaker than a normal power when the RTT measuring unit performs the measurement. Hulvey teaches the parameter modification unit sets a transmission power weaker than a normal power (0054). Examiner relies upon the rationale for combining Saito and Hulvey as cited above for combining the modification of parameters of a Bluetooth communication.

As per claims 9 and 18, Saito teaches the parameter modification unit reverses roles of a master device and a slave device when the RTT measuring unit performs the measurement (0047).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL R. VAUGHAN whose telephone number is (571)270-7316. The examiner can normally be reached on Monday - Thursday, 7:30am

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- 5:00pm, EST. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on 571-272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. R. V./

Examiner, Art Unit 2431

/Syed Zia/

Primary Examiner, Art Unit 2431